

AMENDMENTS TO THE CLAIMS

Listing of the claims:

Following is a listing of all claims in the present application, which listing supersedes all previously presented claims:

1. (Currently Amended) A method of manufacturing a surface acoustic wave device that has a surface acoustic wave filter including comb-shaped electrodes, electrode pads, and wiring patterns formed on a joined substrate produced by joining a piezoelectric substrate and a supporting substrate to each other,

the method comprising the steps of:

activating at least one of the joining surfaces of the piezoelectric substrate and the supporting substrate; and

joining the piezoelectric substrate and the supporting substrate in such a manner that the activated joining surfaces face each other, wherein:

the activating step includes the step of carrying out an activation process using one of ion beams, neutralized high-energy atom beams, or plasma of inert gas₁ or oxygen₁ on at least one of the joining surfaces of the piezoelectric substrate and the supporting substrate;

the joining step includes the step of directly joining the piezoelectric substrate and the supporting substrate at room temperature;

the piezoelectric substrate is a lithium tantalite₁ or a lithium niobate piezoelectric single-crystal substrate₁ that is a rotated Y-cut plate having a surface acoustic wave propagation direction X; and

the supporting substrate is a single-crystal substrate containing sapphire as a main component, or a ceramic substrate containing aluminum oxide, aluminum nitride or silicon nitride as a main component.

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Previously Presented) The method as claimed in claim 1, wherein the step of joining the piezoelectric substrate and the supporting substrate is carried out in a vacuum, or an atmosphere of a high purity gas.

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Currently Amended) A method of manufacturing a surface acoustic wave device that has a surface acoustic wave filter including comb-shaped electrodes, electrode pads, and wiring patterns formed on a joined substrate produced by joining a

piezoelectric substrate and a supporting substrate to each other, the method comprising the steps of:

activating at least one of the joining surfaces of the piezoelectric substrate and the supporting substrate; and

joining the piezoelectric substrate and the supporting substrate in such a manner that the activated joining surfaces face each other, wherein:

the joining step includes the step of directly joining the piezoelectric substrate and the supporting substrate at room temperature;

the piezoelectric substrate is a lithium tantalite₁ or lithium niobate piezoelectric single-crystal substrate₁ that is a rotated Y-cut plate having a surface acoustic wave propagation direction X; and

the supporting substrate is a single-crystal substrate containing sapphire as a main component.